

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 Claims 1-18 (Canceled).

1 19. (New) A controlled deflection roll having a rotatable roll shell which is
2 penetrated by a stationary shaft, a hydraulic bearing arrangement between shaft and roll shell,
3 which is formed by individual hydrostatic bearing elements arranged axially beside one another,
4 which each comprise a radially movable force element having an outer bearing pocket element,
5 the outer bearing pocket element having a cylindrical outer bearing surface supporting the
6 cylindrical roll shell hydrostatically on an inner shell circumferential line, and having an edge
7 bearing unit provided at each end of the roll shell, the outer bearing pocket element in each case
8 being mounted hydrostatically on a spherical inner bearing surface running concentrically with
9 respect to the inner circumferential line of the roll shell.

1 20. (New) The controlled deflection roll as claimed in claim 1, the hydrostatic
2 bearing elements in each case having an inner hydrostatic supporting element, on which the inner
3 bearing surface is formed.

1 21. (New) The controlled deflection roll as claimed in claim 1, the force
2 element being formed as a pressure piston, which is guided such that it can be moved radially in
3 a recess in the shaft.

1 22. (New) The controlled deflection roll as claimed in claim 1, the inner
2 bearing surface being assigned an inner bearing pocket element.

1 23. (New) The controlled deflection roll as claim in claim 1, the outer bearing
2 pocket element being formed by an outer hydrostatic supporting element, which accommodates
3 an inner bearing pocket element while forming an inner bearing edge surface.

1 24. (New) The controlled deflection roll as claimed in claim 1, the spherical
2 inner bearing surface being provided on an inner supporting element of a force element.

1 25. (New) The controlled deflection roll as claimed in claim 1, the inner
2 bearing surface consisting of individual surface sections.

1 26. (New) The controlled deflection roll as claimed in claim 1, the hydrostatic
2 bearing elements each being connected to a feed line for a pressure fluid for feeding bearing
3 pocket elements.

1 27. (New) The controlled deflection roll as claimed in claim 26, the feed lines
2 for the pressure fluid each being connected to a control unit which determines the pressure and
3 the flow of the pressure fluid.

1 28. (New) The controlled deflection roll as claimed in claim 26, it being
2 possible for outer and inner bearing pocket elements to be pressurized with a constant volume
3 flow of a pressure fluid in each case.

1 29. (New) The controlled deflection roll as claimed in claim 1, the edge
2 bearing unit at the end of the roll shell being formed by an antifriction bearing arranged on a
3 radially moveable bearing ring in each case.

1 30. (New) The controlled deflection roll as claimed in claim 1, the edge
2 bearing unit at the end of the roll shell being formed by at least two hydraulic bearings arranged
3 distributed in the circumferential direction on a radially movable bearing ring, which are formed
4 in the same way as the hydrostatic bearing elements.

1 31. (New) The controlled deflection roll as claimed in claim 1, the hydrostatic
2 bearing elements being arranged along opposite rows between the two edge bearing units.

1 32. (New) The controlled deflection roll as claimed in claim 1, it being
2 possible for a heating medium to be fed into an annular space between roll shell and shaft.

1 33. (New) The controlled deflection roll as claimed in claim 1, the roll shell
2 having an outer resilient cover.

1 34. (New) The controlled deflection roll as claimed in claim 1, the outer
2 hydrostatic supporting element in each case being assigned a sealing gap maintaining apparatus,
3 which comprises a hydrostatic mounting element which an independent pressure medium supply.

1 35. (New) The controlled deflection roll as claimed in claim 34, the
2 hydrostatic bearing element being formed outside the outer bearing edge surface on the outer
3 hydrostatic supporting element and comprising at least three bearing pockets arranged distributed
4 circumferentially and fed jointly via connected pressure lines.

1 36. (New) The controlled deflection roll as claimed in claim 34, the
2 hydrostatic bearing element having a plurality of bearing pockets arranged at a distance from one
3 another and bounded by an annular surface in each case.